

Occasionally a few species of Myxomycetes were found in varying abundance, but usually they furnished a barren collecting ground. On one morning these logs everywhere along the river were found to be thickly covered with *Comatricha laxa* Rost. and *Enerthenema elegans* Bowm.

An endless amount of both species could have been gathered. Other occasions were apparently just as favorable, but at no other time did either species appear during that summer or the next.

It is easy to understand from an occurrence like this that a species may be present in large quantities in the plasmodial state and still fail to be observed even by a careful collector. Such a plant as *Cribraria violacea*, which has been detected at half a dozen stations stretching from Germany to Illinois, is in all probability general in its occurrence, but for the reasons given has failed as yet to be widely detected.

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A TRAGEDY OF THE FOREST *

In the forests of tropical regions, where vegetable growth is rank and the resulting strife for supremacy very keen, many plants are forced to find a home upon the trunks and branches of trees. Among these are the greater part of the orchids and bromeliads, and many of the aroids, ferns, and hepatics of these regions, which thus often clothe the trunks and branches with a living mantle. Such, however, are harmless, for they work no injury to the trees which furnish them a home. But there are others which are not of this harmless nature. These have their beginnings as weak epiphytes, and from guests rapidly develop into masters, finally destroying the tree which gave them friendly shelter when young.

If you ever visit a tropical forest, seek for some of these. It will not take a long hunt to find one. Look in the crotch of some tree or on the stump left by some broken limb, or wherever a bit of humus has collected to furnish a foothold for the seed, and you may see a small plant, perhaps but a few inches or a foot

* Illustrated with the aid of the McManes fund.

or so high, with a few large obovate fleshy leaves. Descending from the lower part of the stem you will usually find a few long roots, harmless looking and in appearance much like dangling ropes. Here is the beginning of a tragedy, for unless something

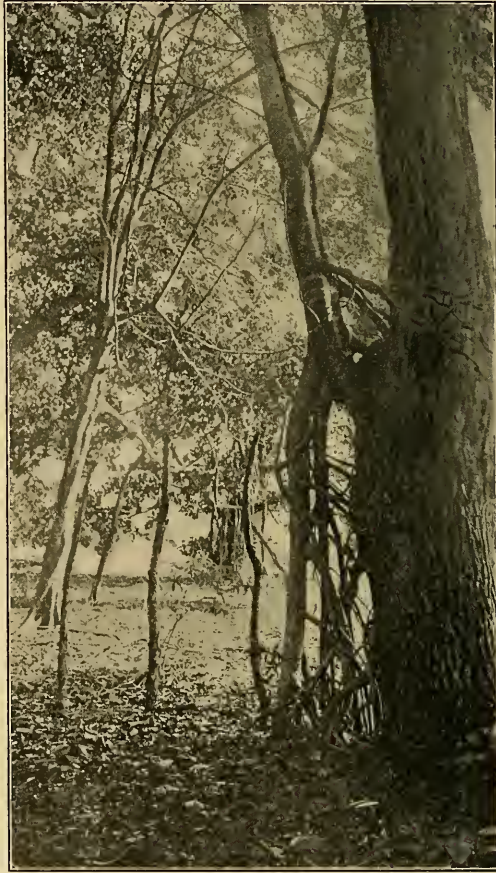


FIG. 1. The *Clusia* forming a trunk and sending out lateral roots.

happens to kill this young plant, the tree upon which it has found a resting place is surely doomed.

It is some time before the fate of the foster-tree becomes evident, for the long roots must reach the ground and increase in diameter, several of them finally forming the trunk of the new

tree. On the left-hand side of the trunk of the tree, in the first illustration accompanying this article, where a limb has been broken away, one of these plants may be seen. Not only do roots descend, but some of them throw themselves around the tree, a



FIG. 2. The *Clusia* firmly established and lashed to the supporting tree.

feature clearly shown in the same illustration. The new tree is small as compared with its foster-parent, but look at the second and third illustrations which depict more advanced stages of the tragedy. In the former note how large have become the trunk-like roots and how many other roots have surrounded the trunk of

the foster-tree like great tentacles which are slowly but surely strangling it. It is but a short step now to the end, for soon the tree, which gave support and a home to the baby plant, loses its life, finally going into decay and falling away, leaving its one-time epiphytic guest master of the situation.



FIG. 3. A *Clusia* from Jamaica. (Photograph loaned by Dr. M. A. Howe.)

This is the tragedy as I saw it enacted many times in the forests of Haïti, where two of the photographs were taken from which the illustrations were made. The scene is laid on the north side of the island, about eighteen miles to the west of Cap Haïtien,

and not far from the little village of Port Margot. It is not necessary that you visit that particular locality, for nearly anywhere in a tropical forest you may see the same thing taking place. In this instance the ungrateful plant was *Clusia*, but there are other plants * which gain their ends in the same way. No wonder that in the English-speaking portions of the West Indies this plant has received the name of the "Scotch attorney," for when it once obtains a hold it never lets go while there is anything to be gained.

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REVIEWS

"Gray's Manual," Seventh Edition †

The long anticipated seventh edition of "Gray's Manual" has appeared, and proves to be an attractive and carefully prepared work of 926 pages, quite copiously illustrated with small but generally clear and accurate figures scattered throughout the text. The arrangement followed is that of Engler & Prantl, and the plan of prefacing the treatment of the species in a genus with a specific key is generally adopted. The authors, or editors as they designate themselves, Professors B. L. Robinson and M. L. Fernald, of Harvard University, are to be cordially and sincerely congratulated on the successful termination of their work, which not only exhibits on every page the learning for which the authors are so well known, but shows every evidence of painstaking care and an evident desire to embody the latest researches

* The last report of the Missouri Botanical Garden has an illustrated paper on "The Florida Strangling Figs" by Dr. Ernst A. Bessey. Two species of *Ficus* are described; one (*F. aurea*) having the curious "habit of beginning its growth as an epiphyte and later becoming terrestrial by sending down numerous slender roots which eventually thicken and fuse together, finally wholly surrounding and strangling the host." The seeds of the same species require light in order to germinate; this peculiarity is no doubt related to its epiphytic habit. — EDITOR.

† Gray's New Manual of Botany (Seventh Edition — Illustrated). A Handbook of the Flowering Plants and Ferns of the Central and Northeastern United States and adjacent Canada. Rearranged and extensively revised by Benjamin Lincoln Robinson and Merritt Lyndon Fernald. Pp. 926. f. 1-1036. American Book Company, New York, 1908. \$2.50. [Issued September 18.]